Theoretical Driving Course notes

Lesson 1

1. **LTO** - Land Transportation Office
    a. License
    b. Registration
    c. Headed by Assistant Secretary
2. **LTFRB** - Land Transport Franchising and Regulatory Board
    a. Public Utility Vehicles
3. **History**
    a. February 6, 1912 - Legislative Act 2159 - Automobile Section
    b. 1926 - Act Number 3045 - Automobile Division under BPW (Bureau of Public Works)
    c. January 1, 1933 - Act Number 3992 “Revised Motor Vehicle Law”
    d. June 2, 1945 - Reorganizing the division and its function (section chief, division chief, director)
    e. June 20, 1964 - RA 4136 or the Land Transportation Traffic Code
    f. March 20,1985 - Executive Order 1011 – Land Transportation Commission (LTC)
    g. January 30, 1987 to Present - Land Transportation Office (LTO); Land Transportation Franchising and Regulatory Board (LTFRB).
4. **Mission** - Rationalize the land transportation services and facilities and to effectively implement the various transportation laws, rules and regulations.
5. **Vision** - A front line government agency showcasing fast and efficient public service for a progressive land transport sector.
6. **Mandate**
    a. Register roadworthy and emission-compliant motor vehicles;
    b. License quality drivers; and
    c. Put order on the road and enforcement of land transportation laws, rules and regulations
7. **Republic Act No.**
    a. 4136 - Land Transportation and Traffic Code
    b. 8794 - Motor Vehicles User’s Charge (MVUC) Law

Lesson 2

1. Motor Vehicle - any vehicle propelled by any power other than muscular power using the public highways
2. Passenger Automobile - pneumatic-tire vehicles
    a. Touring car
    b. Command car
    c. Speedster

    d. Jeep
3. Articulated vehicle
    a. Any motor vehicle with a trailer
    b. No front axle
    c. Rests upon motor vehicle
    d. Load is borne by the motor vehicle
4. Driver - every and any licensed operator of a motor vehicle
5. Professional driver - hired or paid for driving or operating a motor vehicle, whether for private use or for hire to the public
6. Owner
    a. The actual legal owner of a motor vehicle
    b. Vehicle is registered under his name with LTO
7. Garage - where the vehicle is park and kept, not including public areas
8. Gross weight - measured weight of a motor vehicle plus the maximum allowable carrying capacity
9. Highways
    a. every public thoroughfare, public boulevard, driveway, avenue park, alley, and callejon
    b. DOES NOT INCLUDE private roadways
10. Parking/Parked - brought to a stop on the shoulder or proper edge of a highway
11. Tourist - a foreigner who visits from place to place for pleasure or culture
12. **Motor Vehicle Registration System**
    a. Section 5 - Compulsary Registration of Motor Vehicles
    b. Section 6 - Application and Payments for Registration
        i. Private
        ii. For Hire
        iii. Government
        iv. Diplomatic
    c. Section 8 - Schedule of Registration Fees
        i. Aged Private Vehicles - refers to private passenger cars registered under E.O. 43 series of 1986. Pursuant to MC # EMA-MC-01348 dated 8/18/01
    d. Section 9 - Permissible Weights and Dimensions of Vehicles in Highways Traffic
    e. Vehicle Category
        i. Light - up to 1600kg
        ii. Medium - 1601 to 2300kg
        iii. Heavy - 2301kg to up
    f. Monthly schedule is based on the last digit of the plate number.
        i. **NOTE:** Vehicles may be registered two months in advance
        ii. 1 – January
        iii. 2 – February
        iv. 3 – March
        v. 4 – April
        vi. 5 – May
        vii. 6 - June

viii. 7 - July
ix. 8 - August
x. 9 - September
xi. 0 - October
xii. November and December - no registration renewals

g. Weekly schedule is based on the second to the last digit of the plate number.
   i. 1, 2, 3 – 1st to the 7th working day of the month
   ii. 4, 5, 6 – 8th to the 14th working day of the month
   iii. 7, 8 – 15 to the 21st working day of the month
   iv. 9, 0 – 22nd to the last working day of the month

13. The **LTO-issued document** that signifies **ownership of a vehicle** is called the **Certificate of Registration (CR)**.
14. The **CR** is a legal document issued by the **Land Transportation Office (LTO)** upon vehicle registration. It contains details such as the vehicle's make, model, engine number, chassis number, and the registered owner's name.
15. Along with the **Official Receipt (OR)**, the CR serves as proof that the vehicle is legally registered with the LTO.

Lesson 3

Learning Objectives:

- **Understand the motor vehicle system of the Philippines**

TOPIC CONTENT:

SECTION 10: Special Permit - Vehicles exceeding the permissible dimension without special permit are not allowed to be operated on public highways.

SECTION 11. Additional Fees - Any changes on Certificate of Registration or Driver's License requires additional fees otherwise known as miscellaneous transactions.

SECTION 12. Fee for the Original Registration for Part of Year - Computation of registration fee for the first year of registration.

SECTION 13. Payment of Taxes upon Registration - No proof of payment of taxes – No Registration.

SECTION 14. Issuance of Certificates of Registration - Numbered certificate of registration (MV File No.)

SECTION 15. Use and Authority of Certificates of Registration - A photocopy or the original CR are required to be preserved and carried in the car by the owner or driver of a motor vehicle.

SECTION 16. Suspension of Registration Certificate

Registration of MV may be suspended if found:

- Unsightly
- Unsafe
- Overloaded
- Improperly marked or quipped
- Unfit to be operated
- Capable of causing excessive damage to the highways
- Not conforming to minimum standards and specifications

SECTION 17. Number Plates, Preparation and Issuances

- **MV Private -** all numbers and letters are green with white background for the old plates while black with white background for the new plates. Old plates have 3 letters and 3 numbers. New plates have 3 letters and 4 numbers**.**
- **MV For Hire-** all numbers and letters are black with yellow background. Rainbow plates are for tourist MV.
- **Trailer Plates-** all numbers and letters are green with white background for the old plates while black with white background for the new plates.
- **Trailer Plates For Hire-** all numbers and letters black with yellow background.
- **MV Government -** all numbers and letters are red with white background.
- **MV Diplomatic –** all numbers and letters are blue with white background and with four or five numbers.
- **MC/TC Private -** all numbers and letters are green with white background for the old plates while black with white background for new.
- **MC/TC Government -** all numbers and letters are red with white background.
- **TC For Hire -** all numbers and letters are black with yellow background.

Validation Stickers and Plate Year Tags

Validation Stickers –are stickers that are attached on the windshield.

Plate Year Tags – are stickers that are attached on the plates of vehicles indicating the year of registration.

Regional Assignments of Letters in Plate Number Issuance

Assignment and distribution of Motor Vehicle License Plates from July 1, 2016 onwards based on Memorandum Circular No. 2018-2143 (Annex I). The starting letter of the plate number indicates the region where the vehicle was first registered

- Region I – I
- Region II – B
- Region III – C
- Region IV-A – D
- Region IV-B – V
- Region V – E
- Region VI – F
- Region VII – G
- Region VIII – H
- Region IX – J
- Region X – K
- Region XI – L
- Region XII – M
- NCR – N
- CAR – Y
- CARAGA – Z

PROTOCOL PLATES as per DOTr D.O 2015-013

- 1 – President of the Republic of the Philippines
- 2 – Vice President of the Republic of the Philippines
- 3 – Senate President
- 4 – Speaker of the House Representative
- 5 – Chief Justice of the Supreme Court
- 6 – Cabinet Secretary
- 7 – Senator
- 8 – Congressman / Member – House of Representative
- 9 – Associate Justice of the Supreme Court
- 10 – Solicitor General, Presiding Justice and Other Justices of the Court Appeals
- 11 – Chairman of the Commission on Elections
- 12 – Cabinet Undersecretary
- 14 – Chief of Staff, AFP and Chief, PNP
- 16 – Regional Trial Court Judges (RTC)
- 17 – Metropolitan Trial Court (MeTC), Metropolitan Trial Court in the Cities (MTCC), Metropolitan Trial Court (MTC) and Sha'ra Court

MV Plates Issuance

The issuance of these Plates are at any LTO Registration Offices where the MV, TRL, MC & TC are first registered.

SECTION 18. Use of Number Plates

- At all times, number plates must be displayed in conspicuous places, one in front and one in the rear.
- The number plates must be kept clean and cared for, and firmly affixed to the motor vehicle in such a manner as will make it entirely visible and always legible.

Exemption to MV Registration

- road rollers, trolley cars, street-sweepers, sprinklers, lawn mowers, bulldozers, graders, fork-lifts, amphibian trucks, at cranes if not used on public highways, vehicles which run only on rails or tracks, and tractors, trailers and traction engines of all kinds used exclusively for agricultural purposes.
- Construction or agricultural equipment or machineries are not allowed in public road, hence, not subject for registration

Lesson 4

Learning Objectives:

- Understand the driver's licensing system of the Philippines
- Know the difference among the student permit, non-professional driver's license, professional driver's license and conductor's license

TOPIC CONTENT:

SECTION 19. Duty to Have a License

The license must be carried at all times when operating a motor vehicle and shall be shown and/or surrendered for cause and upon demand to any person with authority under this RA 4136 to confiscate the same.

SECTION 20. License for Enlisted Men Operating Government Vehicle (Repealed by BP398)

SECTION 21. Operation of Motor Vehicle by Tourists - Any tourist or transients desiring to operate a motor vehicle are be allowed to do so for a period of not more than 90 days. Provided, bona fide tourist and transients who are duly licensed in their respective countries.

After ninety (90) days, they are required to have a Philippine driver's license.

SECTION 22 and SECTION 23. Application for Driver's License (refer to Supplemental IRR of RA 10930)

Professional - An authority embodied in a form prescribed by the LTO to a person to operate a private and public utility vehicle for a fee. Shall mean every and any driver hired or paid for driving or operating a motor vehicle, whether for private use or for hire to the public.

Requirements:

- At least eighteen (18) years of age
- With valid non-professional license
- No contagious disease

Non-Professional - An authority embodied in a form prescribed by the LTO to a person to operate a private motor vehicle.

Requirements:

- At least seventeen (17) years of age
- With Valid or Expired Student Permit (SP)

SECTION 23. Issuance of Driver's License, Fees and Validity (amended by RA 10930)

- shall be entitled to a renewal of such license for ten (10) years – provided, however, that DL holder has no traffic violation prior to renewal.
- The LTO shall serve as the repository of all lawfully issued traffic violation.
- Establishment of stricter rules before the issuance of Driver's License.

Demerit Point (Traffic Violation Points) – an arithmetical value, specified by integer numbers, assigned to and accumulated by a driver-violator for every corresponding traffic violation committed as used in the Point System

Categories of Violations and their corresponding demerit points

1. **Grave violation** – 5 demerit points
2. **Less grave violation** – 3 demerit points
3. All other violations not otherwise enumerated as grave or less grave which shall be considered light – 1 demerit point

Drivers of public utility vehicles (PUV) shall be meted double the number of demerit points for every traffic violation committed while operating a For Hire motor vehicle.

Including the driver of a private motor vehicle operating as a PUV but without proper authority from the LTFRB

Accumulation period – during the validity of DL

Driving Enhancement Program (DEP)

- All holders of driver's license for renewal shall be required to attend the DEP
- Holders of delinquent DL must attend the DEP and must pass the theoretical and practical examination
- DEP, theoretical and practical examination may be imposed to DL holders during intervention program

A driver who is not able to complete the intervention program within thirty (30) days from his last apprehension, after a notice has been given, shall have his driver's license suspended until he is able to attend the required course.

Period of Prohibition from Non-Pro to PRO or additional DL Code

- 1-2 demerit pts – 3 months prohibition
- 3-4 demerit pts – 6 months prohibition
- 5 or more demerit pts – 1 year prohibition

SECTION 24. Use of driver's license and identification card (amended by BP398) - Every license issued under RA 4136, as amended, to any driver shall entitle the holder thereof, while the same is valid and effective, to operate motor vehicles described in such license

SECTION 25. Driver's Record

Any driver who changes his address shall, within fifteen days, are to notify the LTO in writing of his new address, name and address of his new employer, the number of the motor vehicle he is employed to operate, and such other information as the LTO may require.

SECTION 26. Renewal of License (refer to Supplemental IRR of RA 10930)

SECTION 27. Authority to Suspend, Revoke and Reinstate Driver's License (amended by BP398)

Without prejudice to the authority of the court in appropriate cases and except, the Director shall have exclusive power and authority to suspend or revoke for cause any driver's license

SECTION 28. Driver's Bond (amended by BP398)

The driver may be required to post a bond before reinstating a DL as a result of any damage incurred by the driver to serve as a surety.

SECTION 29. Confiscation of Driver's License (amended by BP398)

Only LTO deputized Traffic enforcers are allowed to confiscate driver's license

SECTION 30. Student-driver's Permit (SP) (refer to Supplemental IRR of RA 10930)

Requirements:

- Sixteen (16) years old for Filipinos and Eighteen (18) years old for Foreigners
- Able to read and write (English, Filipino or any major dialect)
- Physically and mentally fit
- Mandatory 15 hours driving education (from LTO or accredited driving school) before taking the written examination
- Valid for a period of one (1) year – RA 4136 Section 30
- Expired SP for not more than one (1) year may be used only to apply for DL
- Must pass the theoretical examination with the passing rate of 80% (20/25)
- Renewable SP upon payment of renewal fee.
- No need for theoretical examination on plain renewal of SP

Validity of Student Permit

- **YEAR 1: Valid SP - 1st Year – Learn to Drive** – one month for NPDL
- **YEAR 2: Expired SP - 1st year of Expired SP** - Apply only for DL and No driving lesson
- **YEAR 3 or More: Delinquent SP After one year of expired SP** – must renew SP with written exam

Expired SP - may be renewed after the date of expiration upon payment of renewal fee and appropriate fines and/or penalty, if there is any.

Delinquent SP - may be renewed after passing the written examination upon payment of renewal fee and appropriate fines and/or penalty, if there is any.

SECTION 31. Imitation and False Representation

No person shall make or use or attempt to make or use a driver's license, badge, certificate of registration, number plate, tag or permit and imitation or similitude of those issued DL or SP

SECTION 32. Exceeding Registered Capacity, Issuance of Conductor's License, Validity and Fee

- No person operating any motor vehicle are allowed more passengers or more freight or cargo on his vehicle than its registered carrying capacity.
- No person operating any motor vehicle allowed any passengers to ride on the cover or top of such vehicle.
- No driver is allowed to let any person ride on the running board, step board, or mudguard of his motor vehicle for any purpose while the vehicle is in motion.

Conductor's License - is an authority embodied in a form prescribed by the LTO to a person to assist the driver of a public utility vehicle to collect fares and/or to ensure the safety of the passengers and/or cargo while the said vehicle is in operation.

Requirements:

- Eighteen (18) year old and above
- Physically and mentally fit

- No contagious disease
- Able to read and write (English, Filipino etc.)
- Must pass the online examination (new & delinquent)
- No unsettled traffic violation
- Attended & passed the Road Safety Seminar
- No pending criminal cases

Lesson 5

Learning Objectives:

- Learn what is law enforcement and its types
- Learn the ticketing system implemented in the Philippines
- Know the other government agencies working hand-in-hand with LTO

TOPIC CONTENT:

Law Enforcement

- Put order on the road and enforce land transportation laws, rules and regulations.
- To carry out effectively a rule of conduct or action prescribed by a controlling authority and formally recognized as binding by the people in a given territory.

Types of Enforcement

- Persuasive
- Preventive
- Punitive

Ticketing System

- Temporary Operator's Permit (TOP) - issued by LTO deputized enforcers for traffic and administrative (non-moving violations) which serves as:
- Receipt for driver's license confiscated ;
- Notice and Summon;
- Temporary driver's license (for 72 hrs. only)
- Traffic Violation Receipt (TVR) - issued by MMDA deputized enforcers for traffic violations committed within Metro Manila (under Sec. 5F of R.A. No. 7924 dated April 15, 1995)
- Uniform Ordinance Violation Receipt (UOVR) - issued by Local Government Units (LGU's) under the Single Ticketing System dated Jan. 26, 2012, MMDA Resolution No. 12-02 (Only in Metro Manila)
- Traffic Citation Ticket (TCT) - issued by the LGU under Sec. 5 of PD 1605 dated Nov. 21, 1978

Note: Non-confiscation of Driver's License under Joint Memorandum Circular No. 1 Series of 2008 dated September 10, 2008, under Sec. 3.4A

Relationship with other Agencies

DOTr - DOTr is the primary policy, planning, programming, coordinating, implementing, regulating and administrative entity of the executive branch of the government in the promotion, development, regulation of a dependable and coordinated network of transportation.

LTFRB - Certificate of Public Convenience (franchising of public utility motor vehicle) including enforcement of the Public Service Law (CA 146).

PNP-HPG - Enforcement of Republic Act 4136

MMDA/LGUs - Responsible for traffic direction and control within Metro Manila and its Localities

DPWH - Responsible for road engineering and infrastructure as well as construction, maintenance and repairs of roads including installation of traffic signs and signals and pavement markings.

Traffic Signs Part 1

Good day to you, student driver!

For this part of our discussion, we will talk about the Traffic Signs. One effective way to ensure safe driving is to identify and be adequately informed about the road signs here in the Philippines.

So, are you ready? Let's begin!

There are three categories of traffic signs: the Regulatory Signs, the Warning Signs and the Guide or Informative Signs.

Let's begin with the first category of road signs:

the **REGULATORY SIGNS**. These are under regulation or law, **where noncompliance will result in a legal offense** that may require surrender of your driver's license.

REGULATORY SIGNS are **usually circular or triangular in shape**. They are usually red or have red outlines to make it easier to see. Others are blue, yellow or green, depending on which sub-group it belongs to.

Under the regulatory signs are the three sub-groups: the PROHIBITIVE SIGNS, the Directional SIGNS and the PRIORITY SIGNS;

First, let's discuss PROHIBITIVE SIGNS. Are these signs familiar to you? The signs you see indicate that all vehicles are prohibited from entering a particular road.

There is also a sign where in selected types of vehicle are prohibited from entering, like Cars, jeepneys, tricycles, buses and others depending on the vehicle pictured in the sign. These are PROHIBITIVE SIGNS that limit some maneuvers, such as NO TURN SIGNS and No OVERTAKING SIGN. Another example of Prohibitive Signs is the NO BLOWING OF HORNSIGN. In addition, there are also warnings related to pedestrians regarding the prohibition of crossing the road.

Even the strict reminder on the use of overpass or pedestrian crossings is also included here.

Also part of the PROHIBITIVE SIGNS are the LOAD AND DIMENSION RESTRICTION SIGNS, that indicate the class of vehicles that is allowed to enter

a particular road or bridge. Examples of these are

NO ENTRY FOR VEHICLES

WITH GROSS AXLE LOAD OF MORE THAN 2TONS,

NO ENTRY FOR VEHICLES WITH GROSS VEHICLE MASS OF MORE THAN 5 TONS,

NO ENTRY FOR VEHICLES WITH MORE THAN 2 METERS OF WIDTH,

NO ENTRY FORVEHICLES WITH MORE THAN 3.5 METERS IN HEIGHT and

NO ENTRY FOR VEHICLES WITH MORE THAN 10 METERS IN LENGTH.

Also included are SPEED LIMIT SIGNS, like these. There are signs for maximum speed restriction, end of speed restriction, and minimum speed restriction.

Now let’s tackle another sub-group of REGULATORY SIGNS, THE DIRECTIONAL SIGNS. These are road signs that indicate the only direction in which the motorist

is obliged to follow. Some examples of this include NO TURNS, ONE WAY and KEEP RIGHT. Often, these signs have white arrows over a blue circle placed in a rectangle with a label.

Now, these are the road signs included in the sub-group PRIORITY SIGNS. These are designed to guide drivers in the priority of passing vehicles at junctions or roads ahead.

One example of this is the STOP SIGN, which means the driver should stop at the designated stop line. It also includes the GIVE WAY SIGN where the driver should yield to the vehicles on the right side of the intersection. So, are the traffic signs we have discussed familiar to you now? Let’s proceed, to learn more.

This is the sub-group, PARKING SIGNS. These are the signs that indicate the allowable parking and loading zone at a given time and place.

Another important sign and ruling that drivers must remember is the NO PARKING sign within four meters of a FIRE HYDRANT.

Other examples of parking signs that inform drivers parking is not allowed are **BUS-PUJ STOPZONE, BUS STOP ZONE and PUJ STOP ZONE**. In case of

violation of the sign **NO PARKING: TOW-AWAY ZONE**, the parked vehicles will be towed.

It is also important to be alert and consider the safety of other road users. REGULATORYSIGNS also include several warnings regarding pedestrians,

children, bikers and persons with disabilities. These signs inform the drivers that there are people around.

The USE SEAT BELT SIGN is used pursuant to **Republic Act 8750** or the **SEAT BELT LAW**. This is to ensure your safety in case of a road accident.

And that's the end of the first part of our discussion on Traffic Signs. I hope this made you more familiar with the regulatory signs you see on the streets. At the

same time, may you clearly understand the meaning of the different PROHIBITIVE SIGNS, DIRECTIONAL SIGNS and PRIORITY SIGNS.

Always remember that these signs should always be followed to avoid accidents and violations. Don't forget to take the quiz at the end of this topic.

See you again, in the second part of this topic!

Traffic Signs Part 2

Good day, student driver!

Let's continue our discussion about Traffic Signs.

In the previous topic, we have talked about various Regulatory Signs and their sub-groups. In this part, we will learn the second category of road signs in the Philippines.

These are the WARNING SIGNS. These are usually triangular in shape and have a red outline. YELLOW is also used for warning signs. These signs are used to alert motorists of the road conditions and dangers ahead. Some examples of this are the ROAD CURVE AHEAD SIGNS. These are warnings to remind us of the use of safe and proper driving speeds on the road with bends or curves.

MERGE SIGNS, INTERSECTION AND JUNCTION SIGNS are also types of warning signs. These are warnings about merging traffic that may require a change in lane or to allow other traffic to merge in your lane.

ADVANCE WARNING OR TRAFFIC CONTROL DEVICE SIGNS. These signs are noticed if you are driving near an intersection. One example of this is the TRAFFIC LIGHTS AHEAD. In this sign, the driver must not park or stop within six meters of this sign as it reduces visibility for other drivers. Also included here are the STOP SIGN AHEAD and GIVE WAY SIGN AHEAD.

Now, these are the ROAD WIDTH SIGNS. This is used to inform you that you are approaching a narrow road or the narrow road is about to end.

Now these are the ROAD OBSTACLE SIGNS. These are used to warn about possible dangers or roadblocks that could slow down your driving. Included here are these signs: OPENINGBRIDGE AHEAD, UNEVEN ROAD AHEAD, HUMP AHEAD, DOWNHILL SIGN, UPHILL SIGN, LOW-FLYING AIRPLANE ZONE, SPILL WAY SIGN, FLOOD-PRONE AREA,LANDSLIDE-PRONE AREA, ANIMAL CROSSING AHEAD and SLIPPERY WHEN WET. You also need to slow down when you see these Warning Signs because other road users such as children, PWDs, and bikers are common in the area.

Also take note of the RAILWAY CROSSING SIGNS. These are designed to alert drivers of railroad tracks ahead. Drivers must be aware of any approaching trains from both directions and be prepared to stop, if necessary. Here are some of the RAILROAD ADVANCE WARNING SIGNS.

This is the ROAD WORK AHEAD SIGN. It informs that there is road construction ahead.

Here are the SUPPLEMENTAL WARNING SIGNS. These are used to provide more information and clarity on primary warning signs. Examples of these are the "when wet" sign combined with the SLIPPERY ROAD warning sign, the NEXT sign to indicate the distance from the Hazard area, and the VERTICAL CLEARANCE sign that indicates the maximum height of the vehicle that fits the road.

Other examples of supplemental warning signs are the SLOW DOWN ACCIDENT PRONEAREA, SLOW DOWN WEIGHBRIDGE AHEAD for weighing vehicles, LANE ENDS and MERGE signs among many others.

Great! Now you know more about our country’s REGULATORY SIGNS and WARNING SIGNS. But wait... there's more! Are you ready to proceed?

Let’s find out the third and final category of road signs in the country, the GUIDE for INFORMATIVE SIGNS. These road signs are usually rectangular and are in green or blue color. These signs are meant to inform and advise road users about the directions, distances and routes.

Under this are the ADVANCE DIRECTION SIGNS that indicate the only direction in which the motorist is obliged to follow. Next are the INTERSECTION DIRECTION SIGNS that are visible in less than one kilometer before an intersection. So you have to be alert while driving so you won’t miss your desired exit. Next are the REASSURANCE DIRECTION SIGNS that inform the approximate distance of a particular exit. Then we have the FINGER and BOARD DIRECTIONSIGNS. These provide directions to towns, scenic attractions, geographical

interests and less important intersections. There are also signs that are meant to inform the road users about the name of the place they are passing or entering, these are the STREET NAMES, TOWN NAMESAND GEOGRAPHICAL FEATURE SIGNS.

If you need to go to facilities such as gas stations, restaurants, hospitals and others, then the SERVICE SIGNS are used to inform the road users of their location. Now you have better knowledge about the meaning of these signs it would be easier to understand them on your next trip.

Did you know that the main Kilometer Zero Marker of the Philippines is located in Luneta Park, Manila? The kilometer zero marker serves as a reference point for measuring distance. There are kilometer posts that can be seen on the road that inform our distance from the zero marker. There are other similar markers found on the streets in different provinces of the country.

The white colored signs with numbers or arrows printed in black seen on significant arterial roads and national highways are called ROUTE MARKERS. This is used to identify and give direction on how far the arterial road is. On the other hand, the blue and white signs here are the ASIAN HIGHWAY ROUTE MARKERS. As additional information, the Asian Highway network or AH is the agreed international project that aims to improve the highway system in Asia. It has 140,000 kilometers of roads within 32 countries.

We are now at the last part of our learning regarding road signs and traffic rules. Let's now learn the OTHER TRAFFIC INSTRUCTION SIGNS. These are additional reminders for increased compliance with regulatory and warning signs that you have learned in the earlier part of our discussion. Some examples of this are the USE OVERPASS, STOP HERE ON RED SIGNAL, SLOW CARS STAY RIGHT and many others.

And last but not the least! Let's learn and remember about the HAZARD MARKERS. These are signs used to emphasize to the approaching driver a marked change in direction of travel and the presence of an obstruction. It is also used to indicate two-way roads and provide an early warning if there is an obstruction on the road. The ONE-WAY hazard markers give the driver the direction to follow. While CHEVRON MARKERS, guide the drivers through the change in horizontal alignment of the road. The TWO-WAY hazard markers are used where it is necessary to define an exposed obstruction on a traffic island nose at which traffic may pass to either side. The OBSTRUCTION MARKERS indicate road closure ahead.

There are also hazard markers used on columns of overpass structure or median road islands. The WIDTH MARKERS indicate a narrowing width clearance designed and placed near the foot of the bridge approach.

And this is where our discussion on TRAFFIC SIGNS ends.

Remember, REGULATORY SIGNS are signs that a driver must follow and failure to comply may cause accidents or penalties due to violations.

WARNING SIGNS are signs used to alert on unexpected or dangerous conditions ahead to keep your driving safe

INFORMATIVE OR GUIDE SIGNS – are signs that give direction to motorists such as cities or municipalities and places such as church, school, airport and gas station.

Congratulations! You have completed this topic. I hope you clearly understand the different categories of traffic signs and remember the importance of every road sign we have studied.

Keep in mind, to guarantee safe and stress-free driving, always be alert and on the know about the road and traffic signs installed on our roads.

Pavement Markings and Signals Part 1

Filipino Driver's Manual (FDM) VOL. 1, PAGE 93

We will now discuss another important and interesting topic. I'm ready! Are you? Come on, let's start!

When you travel, do you notice various markings painted on the street? What do they mean? That’s what we are going to talk about in this session.

PAVEMENT MARKINGS or road markings provide continuous information to road users about roadway alignment, vehicle positioning and other important driving-related tasks. It is important to maintain safety and order on our roads. Each type of pavement marking has its own uses and meaning. Now, let’s discuss them one by one.

First, is the **EDGE LINE**. It is the solid white line that indicates the side of the roadway, separating the road from the curb or sidewalk. Any asphalt or concrete surface beyond this line should not be used in normal driving operations by your vehicle.

CENTER LINE is the solid white line in the middle of the road that is often used to separate traffic flow in opposite directions. Because it isa solid line, overtaking is permitted but is not recommended.

We also see **BROKEN WHITE LINES** on the road. It is a sign of division between lanes leading in the same direction on a multi-lane road. If the street is only two lanes, the broken white line is also used to show its center and to separate opposite traffic. The broken white line is a reminder to stay in your lane. However, orderly and safe overtaking or changing lanes are allowed here. If your lane stops because of the Stop traffic light sign, make sure your car doesn’t go beyond the STOP LINE. It is a horizontal line near the pedestrian lane or intersection. There is also the SOLID WHITE LINE - LANE DIVIDER near intersections or crossroads that imply that drivers have to stay in the lane. The pavement marking SOLID YELLOW LANE DIVIDER means that overtaking from both directions is prohibited. But the crossing movement can be used to cross the other side of the road, for instance, if the

vehicle is parked on the other side. If the pavement marking is a combination of BROKEN and SOLID YELLOW LINE, crossing the part of the broken line is allowed but not on the solid line. This is the SOLID YELLOW DOUBLE CENTER LINE, which strongly prohibits overtaking from both directions as well as crossing movement. It is usually seen on the road with speedy vehicles, blind curves or in accident prone areas.

The CONTINUITY LINE are wider and closer together than other lane markings. If these lines are on your left, that means the lane where you are is ending or exiting and you should switch lanes if you want to continue your current direction. If you're on the right ,you can stay in your lane or move to the exit. It is usually seen on-ramps and exit-ramps on some access highways and freeways.

Question, if you are entering the expressway, what should be your vehicle speed?

While at the entrance ramp carefully check the zone conditions and immediately follow the speed of the vehicles inside the expressway. **TRANSITION LINES** serve as a guide for vehicles to safely pass through roadway obstructions such as islands, median strips or bridge piers. It is also used to inform changes in the width of the traveled portion of the roadway and an increase or reduction in traffic lanes.

GIVE WAY or HOLDING LINES are marks made up of two side-by-side white lines that can be seen on the main road and side road. This suggests that the driver should give way to all traffic on the main road in accordance with the standard sign shown on this side of the road. If you see ROUNDABOUT HOLDING LINES, it tells you where you'll stop before entering the roundabout. Remember, the cars inside the roundabout have the right-of-way over vehicles which are just about to enter. The roundabouts are often divided into two-lane, three-lane and four lane approaches. The general rule in roundabout approaches is that when a vehicle is in the right lane, it must turn to the first exit of the roundabout or go straight to the second exit. When you're in the left lane, either you can go straight, get out to the left exit or make a U-turn. In four-lane approaches, vehicles are separated depending on where the vehicle will go. Vehicles in the outermost left lane are for those entering the roundabout and will make a U-turn. The next lane is for vehicles that will make a left turn, the third lane is for vehicles that are going straight and the outermost right lane is for vehicles that will turn right. We also have roundabouts wherein the U-turn slot comes before entering a rotunda.

Did you get it clearly?

Now, let's move on and discuss PEDESTRIAN LANES. It has two types: the signalized and non-signalized. THE SIGNALIZED PEDESTRIAN LANES consists of signal displays, line markings and traffic lights. This gives priority to vehicles, and only allows pedestrians to cross when the traffic light sign is turned on. Meanwhile, the NON-SIGNALIZED PEDESTRIAN LANE does not have traffic light signals. As a result, vehicles must give way to pedestrians and stop before the pedestrian lane marking. We see these pedestrian lanes more often in our country. Here, we prioritize the safety of pedestrians. Also keep in mind that it is forbidden to block the pedestrian lane when you make a stop here. And that ends our two-part discussion on Pavement Markings.

Pavement Markings and Signals Part 2

Filipino Driver's Manual (FDM) VOL. 1, PAGE 99

Good day to you, Student Driver!

Now let's continue our discussion about Pavement Markings. This is the TURN LINE. It is used to guide vehicles in turning at intersections in order to avoid going to the opposite lane.

LOADING AND UNLOADING BAY LANE LINE is used to indicate the correct location where passengers can ride or get off the vehicle, especially for public utility vehicles. It is a solid white or yellow line on the side of the road that gives space for the vehicle and the unloading area.

Most of the time there are continuity lines that can also be seen in this part of the road. This is the markings for PARKING BAY. The lines are for the smooth and efficient use of the dedicated parking area. There are also parking spaces reserved only for Persons with Disabilities.

APPROACH PAVEMENT MARKINGS FOR ISLANDS AND OBSTRUCTIONS are the oblique markings on the road. These guide the vehicles to their desired paths of travel and to avoid the island or any obstruction. The length of the transition line depends on the width of the island or obstruction.

RUMBLE STRIPS are horizontal white lines on the road that are slightly raised and are used to alert drivers through vibration, as if the vehicle is being shaken, while passing on it. It gives warning on traffic hazards ahead, such as dangerous curves, accident prone areas or merging traffic.

The CURB STRIPING or painting is used in drop-offs and pick-up zones. This is for the parking and other curb rules to be clear to the road users.

YELLOW CURB PAINTING means NO PARKING. Temporary stop to load or unload passengers is allowed but the driver must stay inside the vehicle.

Meanwhile, RED CURBPAINTING means NO PARKING and NO LOADING and UNLOADING. It is often seen on the streets with heavy traffic flow or areas with fire hydrants. Red curb pavement markings are also used for designated FIRE LANES. This is for the rapid mobility of firefighters and rescue personnel. No vehicle except fire trucks and rescue vehicles can park here.

The RAILROAD CROSSING AHEAD pavement marking has a white, X-shaped sign or “crossbuck" and painted letters "RR'. These markings warn you to be aware of the crossing ahead and to pay particular attention to the possible approach of a train.

PAVEMENT ARROWS are the white arrows on the road used for lane control. It points to the direction in which the vehicle should be headed. The vehicle should just go straight, turn or make a U-turn. So when you're driving in a lane, make sure the pavement marking is in accordance with the direction you want to go.

In the SPEED LIMIT MARKING, the number stated on the pavement is the set limit for the speed of vehicles in an area. This is a reminder in addition to other speed limit road signs that can also be seen on the road.

So, what are the other markers we see on the road?

Here's more...

OBJECT MARKINGS are used to mark obstructions on or across the road that may disrupt your driving. It is usually reflectorized or painted with black and white or yellow stripes so you can easily notice it. We also see roadway objects such as barriers and traffic cones. These are used for separating the lanes and guiding the traffic to move in one direction.

RAISED PAVEMENT MARKING is a safety device used on the road which replaces lane lines. It is usually made of plastic, ceramic, thermoplastic paint, glass or metal that differs in shape and color. Some of these markings are reflectorized so it is easy to see them at night. An example of this is the CAT'S EYES. Also on the streets, we see BUS AND PUV LANE pavement markings. These are the unbroken yellow lines on the road that are used to separate designated lanes for buses and Public Utility Jeepneys from other vehicles. At times, raised pavement markers such as steel bollards and barriers are placed on these lanes.

There are also pavement markings for MOTORCYCLE LANES. It is to mark the designated lanes to serve as a guide for motorists and also to prevent accidents. BICYCLE LANE pavement marking is a solid white line that means only bicycles can use this lane.

Do you now understand the meaning of the different pavement markings?

Now let's talk about TRAFFIC LIGHTS and the meaning of its signals.

TRAFFIC LIGHT SIGNS are road signals for directing traffic using color lights. It is also called a stoplight or traffic signal. GREEN SIGNAL means "go" wherein vehicles can continue driving, just make sure there are no pedestrians or other road users crossing before proceeding. FLASHING GREEN SIGNAL ORARROW means the vehicle facing this green signal can go straight, turn right or left as long as itis done with caution.

YELLOW SIGNAL means the red light is about to light up. So vehicles should safely stop or slow down if they are not inside the intersection. FLASHING YELLOW SIGNAL is a reminder that motorists may continue to drive but with caution.

The RED SIGNAL means that vehicles must stop at the clearly marked line. FLASHING REDSIGNAL means the vehicle should stop and only proceed driving if it is already safe and allowed.

These are the proper hand signals you need to learn in driving. This is used to alert drivers behind you in case you will make a turn, slow down or stop.

How to use them?

If you are turning left, just extend your arm straight out the window. If turning right, extend your arm out the driver's window with your elbow bent and point your hand upward. And to stop, extend your amount the window and point your arm down with your fingers extended. Remember that this can only be used in case of emergencies and if your vehicle signal lights are not working. If this is the case, it should be fixed immediately because vehicles with defective signal lights are not allowed on the road.

Rules on Turning and Overtaking

Learning Objectives

- Learn the rules on turning and overtaking
- Learn the specifics of when and when not to overtake

TOPIC CONTENT

SECTION 37. Driving on Right Side of Highway - …every person operating a motor vehicle or an animal-drawn vehicle on a highway shall pass to the right when meeting persons or vehicles coming toward him, and to the left when overtaking persons or vehicles going the same direction

-…when turning to the left in going from one highway to another, every vehicle shall be conducted to the right of the center of the intersection of the highway.

SECTION 39. Overtaking a Vehicle – The driver of any motor vehicle overtaking another vehicle proceeding in the same direction shall pass at a safe distance to the left thereof.

Cutting an overtaken vehicle - No driver shall drive to the right side of the highway after overtaking before his motor vehicle is safely clear of such overtaken vehicle.

SECTION 40. Driver to Give Way to Overtaking Vehicle. – The driver of a vehicle about to be overtaken and passed by another vehicle approaching from the rear shall give way to the overtaking vehicle on suitable and audible signal being given by the driver of the overtaking vehicle

- … shall not increase the speed of his vehicle until completely passed by the overtaking vehicle

SECTION 40. Restrictions on Overtaking and Passing.

(a) The driver of a vehicle shall not drive to the left side of the center line of a highway in overtaking or passing another vehicle proceeding in the same direction, unless such left side is clearly visible, and is free of oncoming traffic for a sufficient distance ahead to permit such overtaking or passing to be made in safety.

(b) The driver of a vehicle shall not overtake or pass another vehicle proceeding in the same direction, when approaching the crest of a grade, not upon a curve in the highway, where the driver's view along the highway is obstructed within a distance of five hundred feet ahead, except on a highway having two or more lanes for movement of traffic in one direction where the driver of a vehicle may overtake or pass another vehicle: Provided, That on a highway within a business or residential district, having two or more lanes for movement of traffic in one direction, the driver of a vehicle may overtake or pass another vehicle on the right.

(c) No driver shall overtake at any railway grade crossing overtaking or pass another vehicle proceeding in the same direction at any railway grade crossing.

Overtaking at an intersection - No driver shall overtake or pass another vehicle in the same direction at any intersection of highways except on a highway having two or more lanes for movement of traffic in one direction where the driver of a vehicle may overtake another vehicle on the right.

Rules on Right of Way, Parking and Other Provisions, and Duties of a Driver in Accidents

Learning Objectives

- Learn the rules on right of way
- Learn the rules on parking
- Learn other driving rules under RA 4136

TOPIC CONTENT:

SECTION 42. Right of Way. – (a) When two vehicles approach or enter an intersection at approximately the same time, the driver of the vehicle on the left shall yield the right of way to the vehicle on the right, except as otherwise hereinafter provided. The driver of any vehicle traveling at an unlawful speed shall forfeit any right of way which he might otherwise have hereunder.

(b) The driver of a vehicle approaching but not having entered an intersection, shall yield the right of way to a vehicle within such intersection or turning therein to the left across the line of travel of such first-mentioned vehicle, provided the driver of the vehicle turning left has given a plainly visible signal of intention to turn as required in this Act.

(c) The driver of any vehicle upon a highway within a business or residential district shall yield the right of way to a pedestrian crossing such highway within a crosswalk, except at intersections where the movement of traffic is being regulated by a peace officer or by traffic signal. Every pedestrian crossing a highway within a business or residential district, at any point other than a crosswalk shall yield the right of way to vehicles upon the highway.

Right of Way on “through highway” or railroad crossing - The driver of a vehicle upon a highway shall bring to a full stop such vehicle before traversing any “through highway” or railroad crossing: Provided, that when it is apparent that no hazard exists, the vehicle may be slowed down to five miles per hour (8kph)instead of bringing it to a full stop. (Section 42 d & 43 c)

SECTION 43. Exception to the Right of Way Rule. – (a) The driver of a vehicle entering a highway from a private road or drive shall yield the right of way to all vehicles approaching on such highway.

(b) The driver of a vehicle upon a highway shall yield the right of way to police or fire department vehicles and ambulances when such vehicles are operated on official business and the drivers thereof sound audible signal of their approach.

SECTION 45. Turning at Intersections.

(a) Vehicles turning right must go to the rightmost lane and stay on the right lane after turning

(b) Vehicles turning left must choose the leftmost lane and stay on the left lane after turning

(c) The center of the intersection shall mean the meeting point of the medial lines of the highways intersecting one another, except when it is occupied by a monument, grass plot or any permanent structure, other than a traffic control device.

Yellow box prohibitions:

- Do not block the intersection even when making a turn
- Do not make a U-turn
- Yield the right-of-way to those inside the yellow box
- Never communicate or exchange pleasantries with fellow motorists or road users
- Do not park within 6 meters upon intersections
- Do not load/ unload passengers or goods

SECTION 46. Parking Prohibited in Specified Places –

1. In an intersection
2. On a crosswalk
3. Within 6 meters of the intersection
4. 4 meters from the driveway entrance
5. Within 4 meters from a fire hydrant

6. In front of a private driveway
7. On the roadway side of any unmoving or parked MV at the curb or edge of the highway
8. At any place where signs of prohibitions have been installed

SECTION 47. Parked Vehicle. – Whenever a motor vehicle is parked unattended on any highway, the driver thereof must turn off the ignition switch and stop the motor and notch effectively the hand brake.

SECTION 51. Hitching to a Vehicle. – No person shall hang on to, or ride on, the outside or the rear end of any vehicle, and no person on a bicycle, roller skate or other similar device, shall hold fast to or hitch on to any moving vehicle, and no driver shall knowingly permit any person to hang on to or ride, the outside or rear end of his vehicle or allow any person on a bicycle, roller skate or other similar device to hold fast or hitch to his vehicle.

Use of Red Flag

Whenever the load of any vehicle extends more than one meter beyond the bed or body thereof, there shall be displayed at every projecting end of such load a red flag not less than thirty centimeters both in length and width.

Red lights may be used in lieu of the required red flags. These lights should be visible at least fifty meters away. Red flag lights should also be switched on not later than one-half hour after sunset and until at least one-half hour before sunrise. Also, whenever weather conditions requires it, these lights should be turned on as well.

Mufflers

Every motor vehicle propelled by an internal combustion engine shall be equipped with a muffler, and whenever said motor vehicle passes through a street of any city, municipality, or thickly populated district or barrio, the muffler shall not be cut out or disconnected. No motor vehicle shall be operated in such a manner as to cause it to emit or make any unnecessary or disagreeable odor, smoke or noise.

Tires of Motor Vehicles

No motor vehicle with metallic tires shall be operated upon any public highway, and solid tires whenever used shall be of sufficient thickness to prevent the metal rims thereof from coming in direct contact with the road.

Duty of Driver in Case of Accident.

In the event that any accident should occur as a result of the operation of a motor vehicle upon a highway, the driver present, shall:

- show his driver's license,
- give his true name and address

- give the true name and address of the owner of the motor vehicle.

No driver of a motor vehicle concerned in a vehicular accident shall leave the scene of the accident without aiding the victim, except under any of the following circumstances:

1. If he is in imminent danger of being seriously harmed by any person or persons by reason of the accident;
2. If he reports the accident to the nearest officer of the law; or
3. If he has to summon a physician or nurse to aid the victim.

Section 52. No person shall drive or park a motor vehicle upon or along any sidewalk, path or alley not intended for vehicular traffic or parking.

Section 54. No person shall drive his motor vehicle in such a manner as to obstruct or impede the passage of any vehicle, nor, while discharging or taking on passengers or loading or unloading freight, obstruct the free passage of other vehicles on the highway.

Expressway Rules and Regulations

Learning Objectives

- Learn what an expressway is
- Understand the designated use of the different lanes on the expressway
- Learn the different expressway signs

TOPIC CONTENT:

Expressway - a high speed road with controlled entry and exit. It has lane dividers to divide both directions of traffic and usually has two or more lanes in each direction of traffic. Also called tollways because most of the time, drivers have to pay to pass through it.

These include:

- South Luzon Expressway (SLEX)
- North Luzon Expressway (NLEX)
- Southern Tagalog Arterial Road (STAR Tollway)
- Subic-Clark-Tarlac Expressway (SCTEX)
- Tarlac Pangasinan La Union Expressway (TPLEX)
- Manila Cavite Expressway (CAVITEX)

Two-lane expressway

- Lane 1 (left lane) – passing lane
- Lane 2 (right lane) – all vehicles

Three-lane expressway

- Lane 1 (left lane) – passing lane
- Lane 2 (center lane) – cars, buses and freight vehicles with cargo of less than one and a half tons
- Lane 3 (outer right lane) - freight vehicles with cargo higher than one and a half tons, as well as for special and construction equipment vehicles

Four-lane expressway

- Lane 1 (left lane) – passing lane
- Lane 2 (inner left lane) – cars, medium buses and freight vehicles with cargo of less than one and a half tons
- Lane 3 (inner right lane) – large passenger buses and freight vehicles with cargo higher than a ton and a half
- Lane 4 (outer right lane) – special and construction equipment vehicles

Expressway Road Signs

- Direction to expressway signs – tell the direction in which the road enters an expressway
- Prohibition signs – tell what vehicles are not allowed on the expressway such as "driving bicycles and motorcycles," prohibiting vehicles from entering without taillight, and so on
- Proper lane direction signs – inform the driver the correct lane to be at so he can take the right exit depending on his destination
- Special signs (usually 200 m from toll exit)

1. Wrong way – Turn Back
2. Reduce speed now
3. Check brakes – means to reduce speed now; step on the brakes a little when you see it

- Toll road signs- inform drivers that vehicle is approaching the toll plaza. There are also preliminary warning signs to identify the appropriate toll lane for the toll fee payment and to determine the toll rates to be paid.

Motorcycle Guidelines and Parts

Good day to you, Student Driver!

In this part of our discussion we will talk about what you need to know to safely drive a motorcycle.

It is important to understand the following rules and regulations pertaining to motorcycle driving. Note that the motorcycle driver or rider is only allowed to have one passenger. The

rider and his passenger must also wear a standard safety helmet while traveling on the road. It is also strictly prohibited for a passenger to ride in front of the rider which may interfere with safe driving.

Here are the things to keep in mind about the proper use of accessories for motorcycles. The top box or additional motorcycle gear pouch may be placed on the rear side of the motorcycle but it should not exceed the size of two full-faced helmets. For custom-made top boxes, make sure that it does not exceed 2 x 2x 2ft in size, does not block the side mirrors, and must be registered with LTO.

Saddle bags or boxes can be placed at the back of the motorcycle. Make sure it does not exceed 14 inches from the side of the seat nor does it exceed the length of the back of the motorcycle. If you prefer custom-made saddle bags or saddle boxes, also make sure they are registered with LTO.

Riding a motorcycle with children, minors, or younger than eighteen years of age is not permitted in areas where prescribed speed of vehicles is 60 kilometers per hour and in areas with heavy traffic flow and high-speed vehicles.

A child is allowed to ride when he can reach the foot pedal of the motorcycle and if the child is capable of holding on the rider's waist. The child is also required to wear a standard protective helmet when riding a motorcycle. As per the above rules, passengers, especially children are not allowed to sit in front of the rider.

Here are the things to keep in mind about the proper use of motorcycle auxiliary headlights. First, note that the auxiliary headlights switch must be separate from the main headlights switch. Second, the auxiliary headlights should be pointed to the ground and not to the left of the vehicle so as not to glare at oncoming motorists. Third, only white or yellow can be used as color for the lights. Fourth, it should not be affected by any vibration of your vehicle. Fifth, auxiliary headlights should not be used in daylight or when on a well-lighted road. That is why it is important that its switch is separate from that of the main headlights. Sixth, only two auxiliary headlights with upto six bulbs or only LEDs can be placed on your motorcycle. Seventh, the auxiliary headlights should illuminate an area not exceeding ten meters. Eighth, it should not be placed on the handlebars of your motorcycle. Lastly, remember that auxiliary headlights are only supplemental to the main headlights and cannot be used as a substitute.

Now let’s discuss the important parts of a motorcycle.

The three common types of motorcycle in the country are the scooter, underbone type, and backbone type motorcycles. There are many different types of motorcycles but these three are the ones we see most often on our roads. But how do these motorcycles differ in terms of operation?

Note that they are all two-wheel vehicles and are classified as motorcycles but they differ in the way they are operated.

Located on the front side of scooters or fully-automatic motorcycles is the rear brake lever and front brake lever, also on the front is the accelerator grip which is used to operate the vehicle. The left and right side mirrors can be seen on both sides and the dashboard is in the middle.

Underbone type semi-automatic motorcycles differ from scooters or fully-automatic motorcycles since they have a rear wheel foot brake pedal, right hand brake pedal, and foot gear shifter on the lower left side of the motorcycle. As for scooters, it has dashboard and two side mirrors in front. If the underbone type motorcycle is fully automatic, it does not have a foot gear shifter but instead it is controlled the same way as a scooter.

Backbone type motorcycles are the largest type of motorcycles and are manually operated. Like scooter and underbone type motorcycles, it has a throttle on the front right portion and side mirrors on either side. It also has a rear wheel foot brake pedal just like on semi-automatic motorcycles. Its difference from other types of motorcycle is that it has a clutch on the front left side portion. Also a gear shifter on the left foot of the motorcycle. Unlike scooters or fully-automatic motorcycles that have front brakes and the driver doesn't need to use feet to drive.

Now, let's talk about the parts that are often seen on a motorcycle. Let’s first discuss the parts of the dashboard.

The speedometer shows your current running speed from zero to the fastest speed your vehicle can run. This design may vary depending on the model of your motorcycle. On the speedometer of more modern motorcycles you will only see numbers.

The dashboard also has a headlight indicator to see if your headlights are on. Also located here is the odometer which shows the total distance your motorcycle has run. Then the fuel gauge which shows the fuel level of your vehicle. There is also the engine check that indicates if your motorcycle has a problem. Signal lights are also located on your dashboard. Note that the dashboard design may vary butthe fundamental parts we have mentioned are always found in the dashboard of any motorcycle.

Now let's talk about the different switches of a motorcycle. The high and low headlight switch is often located on the left hand side but in some vehicles it is located on the right hand side or in the middle. Usually the turn signal switch and horn switch or the horn are also located on the left hand side while the starting switch is on the right hand side. In other vehicles the engine kill is also on the right hand side. The headlight switch can also be seen here if it is not on the left hand side.

The engine choke lever is often seen in manual clutches and semi-automatic clutches. This is used to reduce the air entering the engine to make the motorcycle easier to operate. Just push this lever when you are ready to drive the motorcycle. Note that it necessary to return the lever to its original position once the engine is running and do not operate the motorcycle while the engine choke lever is “on”. This will not damage your vehicle but it will result in excessive fuel consumption and erratic engine power performance.

Now let's discuss motorcycle brakes. Older motorcycle models usually use drum brakes while newer models use disc brakes. The advantage of disc brakes over drum brakes is that the grip of its brake is stronger. On the other hand, the drum brake's advantage is its design wherein its brake does not get wet when it rains. Also its brake is strong even when the motorcycle travels on flooded roads. This is why there are motorcycles that have disc brakes at the front and drum brakes at the back.

Now, what are the three types of motorcycle drive? First is the chain drive. It is the most common motorcycle we see here in the Philippines. It is the easiest to use and maintain and it is the cheapest or most affordable. Belt drive, on the other hand, is often seen on backbone type motorcycles. Instead of a chain, it uses a belt. Compared to chain drive, it does not loosen quickly but takes up more space. Propellers or direct drives are rare. These are high-powered motorcycles or those motorcycles used in professional racing.

Lastly, for our discussion on motorcycle parts, let's learn about the motorcycle stand. There are two types of motorcycle stand, the side stand and the center stand. There are motorcycles that both have a side stand and center stand. The side stand is used if you need to stop driving your motorcycle momentarily. On the other hand, it is better to use the center stand when the motorcycle will be parked for a longer time.

And those are the things to keep in mind about driving a motorcycle.

Initial Operation and Driving of a Motorcycle

Learning Objectives

- Learn and apply the proper procedure of checking the overall condition of a motorcycle before riding
- Know the basics of handling handle bar, proper shifting and smooth braking
- Know the procedures and considerations when turning, stopping or parking
- Know the principles of loading and unloading passengers or cargoes

TOPIC CONTENT:

Maintenance

Lights

- Ensure all lights such as signal lights, headlights and brake lights are working
- Replace busted bulbs

Drive Chain and Sprocket

- clean and oil every 600-1000 km

Brakes

- brake line must be kept clean and leak free
- brake pads are kept in good condition and not too tight
- no leak in brake hose
- change **brake fluid every 2 years** and **brake hose every 4 years**

Tires

- correct tire pressure
- check tire wear indicator

Engine oil

- check for leaks
- change engine oil every 3000 km for regular oil, 6000 km for synthetic oil and 10000 for fully synthetic oil

Front and Rear Suspension

- keep clean
- check for damage

Gas and Clutch Cables

- replace every 2 years
- replace when they start to break or separate

Starting

- Put down side stand
- Use the key switch on the vehicle
- For semi-automatic and manual motorcycles
    - First turn on the choke lever
    - Check gear indicator is at “N” which means neutral
- Start the engine
    - Press ignition switch is battery is sufficiently charged
    - Use kickstart if battery is not sufficiently charged or if ignition switch fails to start motorcycle
- Switch back choke lever to “OFF” position once engine is running

Moving and Proper Shifting

- Disengage side stand
- Check side mirrors (check left and right if there are no oncoming vehicles)
- Fully automatic clutch

    - Slowly roll “ON” the throttle
- Semi-automatic
    - Shift to desired gear then slowly roll “ON” the throttle (shift to 1st gear when moving from a stop position)
- Manual clutch
    - Squeeze the clutch lever “IN”
    - Shift to the desired gear (shift to 1st gear when moving from a stop position)
    - Slowly Roll “ON” the throttle while slowly releasing the clutch lever

Braking

- Manual Clutch and Semi Automatic Clutch
    - Release the throttle
    - Simultaneously squeeze “ON” the hand brake and the pedal brake
    - Be aware of speed; shifting gear may be required
- Full Automatic Clutch
    - Release the throttle
    - Simultaneously squeeze “ON” the hand brakes

Proper Hand Signals

- Change to left lane – stretch left arm to the left
- Stopping – left arm makes a 90-degree position with forearm pointed down
- Change to right lane – left arm makes a 90-degree position with forearm pointed up

Overtaking or Changing Lanes

- Signal your intention.
- Make sure that you have enough power and speed when trying to overtake.
- Avoid eye-to-eye contact with other driver while overtaking. Eyes on the road.
- Do not force to overtake. Give way if in doubt.
- Follow the rules on OVERTAKING AND CHANGING LANE under RA 4136.

Safety Tips While Driving

- Do not play with the handlebar
- Do not play with the brakes or signal lights
- Avoid eye contact with other motorists. Concentrate on the road
- Follow rules of RIGHT OF WAY

Things to Avoid When Changing Lanes

- Not using hand or light signal
- Disregarding road markings or “counterflowing”
- Frequent changing lanes
- Overtaking when the road is not clear
- Overtaking at an intersection
- Overtaking while turning

- Disregarding traffic signs and signals

Bad Habits to Avoid

- Not following yellow box rule
- Not following rule of precedence at intersections
- Not giving way to emergency vehicles (firetrucks, ambulances, police cars)
- Tailing emergency vehicles
- Disregarding pedestrians
- Ignoring STOP signs
- Disregarding traffic lights
- Racing with fellow drivers

Loading and Unloading Passenger or Cargo

Loading

- Ideally, the weight of the rider must not be less than 1/3 of motorcycle and additional load
- Make sure that the load is properly secured
- Advise the passenger to follow the driver's body at all times
- Advise the passenger to hold tight while the motorcycle is moving
- Advise the passenger not to remove the feet from foot pegs except when dismounting

Unloading or Dismounting

- Passenger first
- Avoid unloading a passenger on a downhill

Common Loading Violations

- Having more than one passenger and in some cases allowing a child to ride in between, even without a safety helmet and not yet capable of reaching the footrests.
- Large objects that block the view of the side mirrors or rear view mirrors
- Not securing load properly on the motorcycle.

Parking

- Avoid parking downhill
- Do not leave the motorcycle parked with the engine still running
- Park the motorcycle in a well-lit area
- Do not park…
- in front of a private garage or drive way
- at the sidewalk
- within six meters of intersection
- within four meters of fire hydrant
- in front of hospital/emergency gate

- in a no parking zone
- in a zone not intended for motorcycles

Motor Vehicle Parts

Good day to you, Student Driver!

In this topic we will discuss the different parts of a vehicle. Let's start with the exterior lights or lights that can be seen outside of the vehicle. First are the headlights or headlamps with white or yellowish light. One headlight each is attached to the right and left front side of the vehicle. Drivers are advised to open it from thirty minutes after sunset until 30 minutes before sunrise or whenever necessary. This also depends on the weather conditions such as heavy rain or thick smoke or fog which may be encountered when traveling on the road. Remember that there should be no red light facing forward.

Vehicle exterior lights also include the front and rear signal lights which are usually yellow, amber, or orange. The front and rear signal lights must be lit at the same time when the vehicle turns on the road. Both right of the front and rear signal lights will light up when turning right, and both left of the front and rear signal lights will light up when turning left.

Vehicle signal lights are also used as hazard warning lights or flashers. But instead of just the right or left signal lights, both the front and rear lights of the vehicle light up simultaneously if it is used as hazard warning lights to alert other motorists on any traffic problem.

Tail lamps and brake lights are exterior lights located at the rear of the vehicle. The tail lamp light and the brake light are both red and are usually located on only one side. The brake light is always brighter than the tail lamp. To make sure your driving is safe, make sure your brake light is working properly. Just turn on the light and step on the brakes to see the brake lights.

It's also important that your vehicle's reverse or backing lights are bright and are working well. These lights only light up when the vehicle is backing or reversing. It cannot be lit when the vehicle is moving forward.

And the last kind of exterior light of a vehicle is the plate lamp. Remember that the plate lamp used to illuminate the vehicle number plate must only be white.

Here are the other exterior parts of the vehicle. This includes: side mirrors on the right and left side of the vehicle, windshield or the large glass in front of the vehicle, and the wipers which are used to clean the windshield of the vehicle.

There are some vehicle models, like SUVs and AUVs, that also have rear wipers. It is used to clean the flat rear glass or windshield and wipe rainwater that was not blown off by the wind.

Vehicles usually have two or four doors. For some vehicle models, there is an additional door at the back. Swinging doors are often seen in vehicles while others, such as vans, have a sliding door design.

All vehicles have an engine hood that is usually located in front and is used to cover the vehicle's engine.

Lastly, the luggage compartment hood. It is usually at the back where the luggage compartment is but for vehicles with engine at the back, the luggage compartment and the hood are in front of the vehicle. If your vehicle is an SUV or AUV, the rear portion of the vehicle can be considered as the luggage compartment hood or fifth door. Another part of the exterior of the vehicle is the fuel tank cap. Make sure it is properly closed so that the fuel tank of your vehicle will be protected and will not easily open.

The underchassis of the vehicle refers to the vehicle parts that can be seen under the vehicle or when the hood of the vehicle is raised. This includes the car engine which is usually in the front while in vans it is located under the driver's seat. This also includes the vehicle's transmission which is connected to the engine and to the vehicle's wheels. The underchassis of the vehicle also has linkages and joints that connect various parts of the vehicle such as the underchassis, the molye of a vehicle, and its wheels to properly turn the vehicle.

The rear axle and differential can also be seen in the underchassis. If the vehicle is front wheel drive, it no longer has a rear axle. Rear-wheel drives such as large vehicles require a rear axle and differential to transmit engine power from the front to the rear of the vehicle.

The muffler and silencer are also located under the vehicle. These help reduce the noise emitted by the vehicle. Remember that removing the vehicle muffler is prohibited since it causes noise pollution.

Can you still follow? Come on, let's proceed.

Let's find out what the various numbers written on the car tires mean as a measure to ensure the safety of the driver and his passengers.

These small numbers written on the tire are safety measures that specify the maximum or the heaviest load that the tire can carry and the maximum tire pressure. As shown in this picture of a sample tire, its maximum tire load is 670kg or 1447 pounds and the maximum air pressure is 340 kilopascals or 50 psi. Remember not to exceed these limits since it can cause your tire to explode but this does not mean that these limits should be reached. As for the recommended tire air or tire pressure, it is best to base it on your vehicle's manual.

Also there are numbers and letters on the vehicle, similar to what is shown in this photo 225/50 R 17 98H. These numbers refer to the type of vehicle that matches the particular tire.

Usually there is a letter written before the first set of numbers whose meaning is as follows: P for Passenger Car, LT for Light Truck, ST for Special Trailer, and T for Temporary. If the numbers do not include letters, it is often a passenger car. The first set of numbers after the letter, wherein for this example is 225, refers to tire width sidewall to sidewall.

The next set of numbers, wherein for this example is 50, is the aspect ratio or the proportion of the width to the height of the wheel. The next letter refers to the construction of the tire: R for Radial, D for diagonal, and B for bias which is the most popular.

The next two numbers, wherein for this example is 17, refer to how many inches the inner diameter of the tire is or the measurement of the tire, from top to bottom.

In the last part, you can see the numbers and letters that refer to the load index and speed symbol of the vehicle, wherein for our example is 98H. The 98 index means that the heaviest load the tire can carry is at 750 kilograms and the H means that the fastest speed that the vehicle can travel is at 210 kilometers per hour. Use this guide and make sure you do not exceed the given limits.

If you need to change a tire, make sure these sets of numbers and letters are the same as those on your new tire.

Now let’s take a look at the interior parts of the vehicle. Let's first discuss the steering wheel. It can be noticed that on newer vehicle models there are many control panels located on the steering wheel. But the most important thing here is the horn which is usually seen in the middle of the steering wheel. Other control panels also seen on the steering wheel depend on the vehicle model. It could be for controlling the radio or car windows and many others.

The headlight switch and the wiper switch can be found behind the steering wheel. The headlight switch is usually on the right and is used to turn on and off the headlights. It is usually located together with the turn signal switch. The wiper switch, that is usually on the left, is used to control the front wiper and also the rear wiper, if the vehicle has one.

The ignition switch is also located in the interior of the vehicle. It is more common in older vehicle models to use a key that is inserted into the ignition. To start a vehicle, you must first put the switch to “accessory”, then to "on", and then to “start”. While in more modern vehicles the key is no longer used, and instead the driver simply presses a button to start or stop the vehicle’s engine. The key of such vehicle models is called the fob.

The gear selector level can also be seen in the interior part of the vehicle, which has two types that are common in the country. First is the manual or stick shifting where you can put in 1st gear, 2nd gear, 3rd gear, 4th gear, 5th gear and reverse your vehicle and also use the clutch for manual selection. The other type is called automatic gear shifting in which you can put your vehicle in park, reverse, neutral, drive, level 3, 2, and low drive conditions.

Pedals such as the clutch pedal, brake pedal, and gas or accelerator pedal can be seen at the lower part of the vehicle's interior. Only the manual vehicle has a clutch pedal.
The brake and gas or accelerator pedals are only present in automatic vehicles. It is also important to note the difference between the brake pedal and the gas or accelerator pedal to avoid any confusion that can cause road accidents. The gas pedal is generally narrower and more elongated compared to the brake pedal which is shorter and wider.

The vehicle has two types of parking levers: the hand parking brake lever and the foot parking brake lever. The hand parking brake lever or emergency brake is usually located next to the driver, which is just pulled if to be used. To release the hand parking brake lever, just press the button located at the end of the lever and then push it downward.
The foot parking brake lever is only seen on automatic vehicles. It is a smaller foot pedal located on the floor to the left of the standard brake pedal. Just step on the pedal to activate and step on it again to release.

Also located next to the driver is the driver control console where the door lock switches and control of the vehicle windows are located. Older vehicle models may not have such features.

In the middle portion of the vehicle, you can see the hazard switch that is used to turn on or off the hazard lights. In the interior of the vehicle there are the cabin lights and its switches which are usually installed close to each other.

Now, let us learn the various instruments that can be found on the dashboard of your vehicle. First is the tachometer which measures the working speed of a car engine or revolutions per minute. Here you can also see the speedometer which measures the speed of the vehicle or kilometers per hour. Also the fuel gauge which measures the fuel level of the vehicle and the radiator temperature gauge which in turn measures the temperature of the engine coolant to prevent overheating.

Also remember these warning lights that may flash on your dashboard: brake warning light, air bag warning light, door ajar or open, oil warning light, anti-lock braking system or ABS caution light, seat belt warning light, coolant warning light, battery warning light, hazard warning light, and check engine light. These warning lights indicate if there is an issue with the vehicle that you need to fix.

Also located in the interior of the vehicle is the air-conditioning control panel, with three controls: the setting, thermostat, and airflow. The setting control is used to adjust the fan power of the vehicle air-conditioner. For thermostat, the cooling function is often used according to the weather here in the Philippines. But there are some vehicles in the country that also have heater functions with thermostat control. The airflow control is adjustable according to your desired aircon settings.

The safety features of the vehicle are as follows: First are the seat belts which are located on all car seats. There are also airbags installed inside the vehicle that only open if the vehicle collides in front or behind it. Airbags are usually installed at the front part of the vehicle but there are also other vehicle models with airbags installed on the sides.The window lock is a safety feature that is ideal to use when there is a child passenger. It locks the car windows so that they cannot be opened easily during the ride.

Head restraints on car seats not only serve as head rests but are a safety feature as well. These will reduce the risk of causing neck injuries to the driver and the passengers, in case the vehicle gets involved in an accident.

Child restraint is not a built-in safety feature in vehicles but under the law it is required to be used if there is a child passenger. The child lock is a safety feature placed behind the car doors. It is used to prevent child passengers from opening the door while the vehicle is moving.

And this is the end of our discussion on this topic. Now you know the different parts of the vehicle located on its exterior, underchassis and interior.

Topic 19: Pre Driving of a Motor Vehicle

Good day! Welcome to SafeRoadsPH.

In this topic, we will discuss the pre-driving orientation for motor vehicles.

These are the things you need to do before driving a vehicle.

The Walk Around Check is a visual inspection of your vehicle. It is good to check the important parts of your vehicle before driving it on the road. First is to check the lights and lamps of your vehicle. Make sure there are no burned-out bulbs and damaged lamps. Next, check the mirrors and windows of your vehicle. Inspect for any cracks or damages. Also check carefully if your vehicle has body scratches that you are not aware of. Since there are instances wherein an untoward incident happened to your vehicle while you are away.

The tires should also be checked before riding your vehicle. Check for any cracks in the side walls of the tires. See if they are flat or with worn-out tread. Also make sure there is no tire bulge on the sidewall of the vehicle's tires. Also check if the tire rims are not damaged.

Next is to check the underchassis of your vehicle. It's best to check for any damage or see if the suspension is worn-out which could cause your vehicle to collapse while traveling on the road. In checking the underchassis, you should also inspect if your vehicle has leaks of either engine oil, transmission fluid, gasoline, Radiator coolant or Brake fluid. If any leak is detected, determine if it is still safe to drive the vehicle or should the damage be repaired first.

Before riding, also check underneath the vehicle if there is a wheel stopper or wedge that you failed to remove, a person repairing or resting under the vehicle, pets, toys, and debris or anything that might get rolled on.

To make sure the ride is safe, make it a habit do a walk-around check before driving.

Now let us learn the pre-start routine before driving your vehicle. For light vehicles, always correct the position of your seat to make sure your position is comfortable, you can reach the pedals and steering wheel properly, and that you can see the road well while driving.

Adjust the seat height, the seat distance to the pedals and steering wheel and also the lean angle. Ensure proper driving position and distance in a way that you should be able to reach the pedals and steering wheel without stretching your legs and arms. Fix your car's side view mirrors and rear view mirrors. Newer vehicles usually have a mirror adjustment console next to the driver. Adjust them to partially see the side of your vehicle as well as those behind it. Always abide by the Anti-Distracted Driving Act regarding the placement of gadgets on the dashboard of your vehicle. If it is unavoidable to place gadgets, make sure they do not exceed the designated 4-inch safe zone and do not interfere with the driver's line of sight or vision. Make sure the locks are tight and the vehicle doors are locked. Always wear a seatbelt and remind passengers to wear it as well.

After doing these you are ready to drive. You can now Switch "on" the ignition or Position your key fob. Rotate it clockwise. For manual clutch vehicles, first make sure that the vehicle gear is in neutral position before starting the engine. If the gear is engaged when starting the engine, the vehicle may move unexpectedly then stall which may damage its gearbox. For automatic vehicles, first make sure the shifting lever is at "P" for park or "N" for neutral, depending on what is stated in the user manual of your vehicle.

It is also a good practice to step on the brakes while starting the vehicle. To start the engine, turn the key clockwise or place the key fob and press the engine start button. Just keep in mind that there are newer car models that do not start until you have stepped on the brake or on the clutch pedal or on both pedals. Also do not "over start" the engine. Once the engine starts running, you can release the key or the engine start button. Also avoid turning the key after the engine is running, because if you do, you will hear a grinding sound that can damage the starter motor.

Now here are the driving skills that you will accomplish in the practical part of your learning in a driving school. For manual vehicles, fully step on the clutch and brake pedals first. Second, place the lever in 1st gear and then release the parking brakelever. Then slowly release the clutch pedal while also releasing the brake pedal. You will feel a very slight vibration indicating that the engine and transmission of the vehicle are already engaged.

Take a quick look at the vehicle's path, step on the brake and clutch pedals if there is any obstruction. At this point your vehicle will move slowly. Gently step on the gas pedal and completely release the clutch pedal. At first, you may find it complicated but surely you'll be able to practice it well during the practical part of your learning in a driving school.

Now let us learn about shifting gears.

In a normal shifting lever or stick: one stands for first gear, two for second gear, three for third gear, four for fourth gear, five for fifth gear, and "R" is for reverse. The center line is usually marked with "N", which means neutral. Remember that the higher the gear, the faster the vehicle gets. Shifting or changing gears depends primarily on the following considerations: speed of the vehicle, RPM or revolutions per minute of the engine, capability of the vehicle, type of road whether it is flat, uphill, or downhill; also depends on weather condition, and on the driver's skills.

To change gears while the vehicle is moving, step on the clutch pedal and at the same time release the gas pedal. Place the shifting lever in the desired and appropriate gear and gently release the clutch pedal while gently stepping on the gas pedal. If you want to brake, step on the brake pedal first and then step on the clutch pedal. If you mistakenly step on the clutch before stepping on the brake, the vehicle's engine and transmission will disengage and it will be difficult for the brakes to slow down your vehicle. Step on the clutch pedal, if necessary, to downshift gears or when bringing the vehicle to a stop.

For operating automatic vehicles, first put the shifting lever in D position. Then, release the parking brakes. Slowly release the brakes and this will make the vehicle move slowly. Step on the gas pedal to speed up. And then step on the brake pedal to slowdown or stop. Just an important reminder, never use the left foot for braking. Also, do not step on two pedals at the same time using the same foot. Stepping on the pedals may be tiring at first. But just like in walking, your legs will get stronger as you get used to driving. You will soon be completely ready to drive!

Driving a Motor Vehicle

Filipino Driver's Manual (FDM) VOL. 1, PAGE 107

Good day to you, Student Driver!

This is the continuation of our discussion on the things you should learn about the initial operation of a motor vehicle.

The steering wheel is used to control the vehicle in the right direction of travel. Always use both hands to control the steering wheel for optimum control of the vehicle. It is best to position both hands in the 9 o’clock and 3 o’clock positions or in the 10 o’clock and 2o’clock positions.

Tracking is a method of steering that allows you to keep your vehicle on the intended path of travel. To do this, look toward the center of the lane and make slight movements with the steering wheel.

There are three ways to hold the steering wheel if you want to turn the vehicle.

First is the hand over hand turning wherein both hands work on moving the wheel, with one hand crossing over the other to continue the turn. This is the easiest way since you turn the steering wheel in a constant motion to turn the vehicle but this is not recommended on vehicles with airbags. In the event that the vehicle is involved in an accident while in the act of turning, the airbag on the steering wheel may open and cause injury to the driver’s arm.

For more modern vehicles, hand to hand steering is more recommended when turning the vehicle where the hands on the steering wheel do not cross each other. For example, when turning right, the right hand will begin at the top of the steering wheel and then the same

hand will pull the steering wheel downward, as you lower your lefthand. When your right hand meets your left hand in the 6 o'clock position you may continue to move the steering wheel upward with your left hand. Do this with the other hand when turning left. This way your hands will not cross each other and your arm will not block the center of the steering wheel where the airbag is.

The third way to hold the steering wheel when turning the vehicle is one hand steering. One hand steering is the smoothest way of turning but the driver has lesser control over the vehicle. This method is recommended for turning while the vehicle is in reverse and the driver is looking at the rear view. While the left hand is on the steering wheel, the right hand can rest on the shifting lever or on the passenger seat. It is important to think carefully about what to do before turning or crossing a lane on the road. To ensure safe driving, always be alert of your surroundings and current situation before you decide to turn or switch lanes.

Before turning or switching lanes on the road, first look in your side mirrors and rearview mirror. Make sure no vehicles or people are blocking your direction of travel. Also don't forget to signal your intention to turn right or left. Turn on the appropriate vehicle signal lights to let surrounding vehicles know what you intend to do. Once done, look again to check if it is already safe to proceed and if there are no road obstructions along your direction of turn or change of lane.

Now here are the proper steps in overtaking the vehicle in front. It is important to make sure your vehicle has enough power and speed when trying to overtake. Avoid making eye to eye contact with the driver of the vehicle being overtaken so as not to lose focus or cause a misunderstanding on the road. When you have passed the vehicle in front, return immediately to your original lane. Also, do not force yourself to overtake if you are in doubt. Just wait for a better opportunity to be able to overtake, if really necessary.

The driver may commit mistakes in turning the vehicle such as understeering and oversteering. Understeering happens when the driver fails to steer enough. This may be due to the driver's incorrect timing or lack of grip on the steering wheel. Oversteering, on the other hand, happens when the driver steers too much than the path of the vehicle. Wet roads can also cause understeering and oversteering, same as the presence of obstructions or debris on the road. That's why tracking is important to be able to adjust using the steering wheel as the vehicle turns. Remember that once the driver releases his grip on the steering wheel the vehicle will automatically return to its original straight path.

Now let us discuss the proper steps in steering the vehicle backwards.

First, step on the brake and put the shifting lever in reverse. Next, turn your body to the right to look at the rear of the vehicle. This is better than looking at the rear of the car using only the rearview and side mirrors. Place your left hand on top of the steering wheel in the 12 o'clock position and your right hand on the passenger seat. Release pressure from the brake and slowly release the clutch pedal to drive the vehicle slowly as you would when driving the vehicle forward. Turn the steering wheel towards your desired location. And keep your foot on the brake without stepping on it while making sure there is no obstruction along your path of travel. This way you can quickly step on the brake necessaries is important to remember

the following to ensure safety when reversing. The turn radius of the front wheels is greater compared to that of the back wheels of the vehicle.

The front will swing out farther than the back when turning so also look after the front of your vehicle to avoid collision. When backing up to the left or right, just turn the steering wheel in the desired direction you are backing. If backing to the left, turn the wheel to the left and if backing to the right, turn the wheel to the right.

Now here are the proper steps for stopping and parking a vehicle. If you want to stop the vehicle, slowly take your right foot off the accelerator or gas pedal and move your right foot on the brake pedal and then step on it gently. For manual vehicles, step on the clutch pedal with your left foot before the vehicle comes to a complete stop. Do not step on the brakes abruptly and forcefully to make sure the vehicle stops smoothly. When the vehicle is stopped, keep your foot on the brake pedal and place the shifting lever in “neutral” for manual vehicles or in “park” for automatic vehicles. Pull the handbrake or park brake before releasing your foot from the brake and then turn the engine off.

There are three ways to park a vehicle.

One of these is the nose in parking which is considered the simplest of the three. If the parking area is spacious, simply turn the vehicle towards the parking slot. But if the parking area is crowded, this is how the nose in parking should be done: First, turn the vehicle in the direction of the parking spot until you reach this position. Drive in reverse while turning the vehicle in the other direction until the vehicle is facing directly opposite the desired parking slot and then enter the vehicle into the parking space.

The second method of parking a vehicle is called reverse parking. Find a safe and unobstructed spot to do this. First set an imaginary reference point near the vehicle parked next to the selected parking spot. Turn away from the parking slot and advance until the back of your car is aligned with the imaginary reference point. Next, use the side and rear view mirrors while slowly reversing into the parking spot so as not to collide with vehicles parked next to it. In the beginning this is hard to do but it will definitely become easier once you get used to it.

The third method of parking a vehicle is called parallel parking. If no other vehicle is parked in the selected area, only align the vehicle parallel or according to the flow of traffic. But if the selected parking spot is in between other parked vehicles, first, pull up alongside the parked vehicle in front of your chosen parking spot. Align your rear bumper with that of the parked vehicle and set it as your imaginary reference point. Then turn the steering wheel sharply in the direction of the parking spot and begin to back up slowly. When your steering wheel is already even with your imaginary reference point or the rear bumper of the other vehicle, straighten out the steering wheel and maneuver toward your parking spot. Do this while looking at the back of the vehicle but make repeated glances to make sure your front bumper is clear.

If parked on a flat road, straighten the steering wheel before turning off the car engine. Here are the things to do when parked on a downhill or uphill road. If parked on a downhill road, turn the steering wheel to the side of the road even with or without a curb available.

When the parking spot is on an uphill road, turn the steering wheel to the side of the road if there is no curb. If there is a curb, turn the steering wheel to the middle of the road. This is done to prevent the vehicle from moving to the center of the road in case of parking brake or gear malfunction. Instead, the vehicle will land on the side of the road or the curb will prevent it from moving.

Now here are the parking signs you need to remember.

A blue parking sign with the letter “P” can be seen in areas designated for vehicle parking. The letter P inside the red circle with a slash in the middle can be seen in areas where parking is prohibited. The third parking sign is for reserved parking or parking spaces reserved for selected individuals only. Some examples are parking lots reserved for employees of an establishment or for emergency vehicles. There are corresponding penalties for not following these parking signs which include towing of your vehicle.

Let us now learn the reminders regarding the proper loading and unloading of passenger or cargo vehicles: Pick up and drop off passengers and equipment only in designated zones. Make it a habit to check and double check the rear view and sideview mirrors of the vehicle before opening the vehicle doors to make sure not to hit other vehicles or cyclists. Allow adult passengers to alight first. If loading or unloading passengers or equipment will cause obstruction or inconvenience, it is advisable to turn on the vehicle’s hazard warning light. Avoid further communication after unloading the passengers. Make sure all doors are closed properly after unloading passengers. Switch the turn signal and check the side and rear view mirrors of the vehicle before moving off. Now here is the post driving routine that a driver should practice. Check important documents, gadgets, and other vehicle equipment. If there is an intention to leave them inside the vehicle, it is better to place them in the section not visible from the outside of the vehicle. Also check if all passengers alight from the vehicle, especially young passengers who may have fallen asleep and failed to get out of the vehicle. Turn off switches, lights, and other vehicle controls. Turn off the engine and remove the car key.

Also don't forget to lock the vehicle once you get off. Do the walk around check again before leaving your vehicle.

It is also good to know and remember the important laws related to driving.

First is the Republic Act 4136 or the Land Transportation and Traffic Code which we discussed in the first part of this module. Also other laws such as RA 10913 or Anti-Distracted Driving Act, RA 10586 or Anti-Drunk and Drugged Driving Act of 2013, RA 8750 or Seat Belts Use Act of 1999, RA 8749 or Philippine Clean Air Act of 1999, and the RA 11229 or Child Safety in Motor Vehicles Act which we will discuss in Module 2.

And this is the end of Module 1 of the Theoretical Driving Course.

Attitude and Behavior

A pleasant day to you, Student Driver!

In this topic, we will learn about Defensive Driving.

Defensive driving is a style in driving using skills and techniques that allows the driver to protect himself against possible collisions and road crashes caused by road hazards, other road users or bad weather.

Road safety is the main benefit of defensive driving. In a few simple steps, you can avoid road crashes. You can even save costs on vehicle maintenance and fuel consumption as other benefits of defensive driving.

But before we discuss defensive driving in detail, let's talk about the human factors that affect our driving. And that is the attitude and behavior of a person. But, what is the difference between the two?

Attitude is the feeling, belief or opinion of being in agreement or disagreement towards something. In driving, an example of a defensive driver's positive attitude is prioritizing safety in any road situation. Another example is being calm even in traffic because he is aware that being impatient while on the steering wheel does not bring any good.

Behavior, on the other hand, is the action or reaction we perform in response to a stimulus or event. Behavior is the action we take based on our attitude. An example of this is operating a motor vehicle in accordance with the speed limit because safety is our main concern. Another defensive driver's good behavior is being calm and patient even in traffic, wherein he does not compete with other motorists or blow the horn rudely.

Now that we know the definition of attitude and behavior in defensive driving, what are the qualities a defensive driver should possess? First, he should have a positive attitude towards road safety. A defensive driver must have control over his emotions, uses defensive driving techniques and his main concern is his safety and of the other road users. In addition, he is also responsible for his driving decisions.
The driver must also be physically and mentally fit to drive. Being physically fit means the driver should be capable of driving and there are no underlying health conditions that may hamper him from driving. These include drowsiness, fainting or heart attack. To be mentally fit, the driver must be able to focus on driving and make the right decisions while driving.

The driver must also have adequate driving training. When all drivers on the road are well-trained, our streets will surely be safer. Here in the Philippines, a theoretical driving course is already being implemented so that drivers understand the various laws and proper behavior while driving before a driver's license could be issued.

Aside from these, a defensive driver must also be able to apply his knowledge of vehicle maintenance. When a driver maintains his vehicle, the chances of encountering malfunction on the road and causing harm to others would be low.

How is defensive driving practiced? Let's take a look at the steps on how to do it. First, search. See the road in front, side and back of your vehicle. Look for road signs and other motor vehicles that may affect your safety.

Next is to identify. Know the potential and immediate hazard that can be encountered on the road. When we are aware of the hazards on the road, it will help us decide what to do.

Then, predict. Try to anticipate what other road users will do next. Since you have no control over other vehicles on the road, it is up to you to drive in the safest way possible. Next is to decide. You must make an immediate decision to avoid imminent danger.

Lastly, execute. You must be able to take action or move based on your decision. Often, when the driver is not aware of defensive driving, he finds it difficult to execute what he wants to do especially in situations that require immediate action to avoid an accident. It is very important that you learn defensive driving so you will not be overwhelmed by fear or panic during difficult situations.

And this is where the first part of our discussion on defensive driving ends.

In this topic, you learned a lot about a driver's proper attitude and behavior. Remember the important steps to be a defensive driver to ensure safety and a hassle-free journey.

Defensive Driving Skills

Filipino Driver's Manual (FDM) VOL. 1, PAGE 41

Good day to you, student driver!

Let's continue our discussion on defensive driving. This time we will talk about the keys to defensive driving. First is concentration. Concentration is a mechanism by which we coordinate and focus on our physical and mental abilities to carry out the task. So, when the driver is focused, certainly traveling will be safer because he becomes more alert and is not easily distracted. Next are the driving plans and decisions. It helps to do route planning before traveling. Driving plan also provides guidance on what to do when faced with various situations such as emergencies and stop-overs.

Another key to effective defensive driving is to consider the view from the vehicle. The driver must be in a comfortable position while driving to properly see the front, back and side of the vehicle. With proper view, the driver can easily see pavement markings, road signs and road hazards. It also helps in proper parking, reversing and changing lanes if overtaking. Next is the speed. The faster the vehicle, the harder it is to control. Driver’s decision-making time is

also shortened if the vehicle is moving fast. So, a defensive driver uses the right speed depending on the road he is traveling. He observes the speed limit and does not interfere with other road users.

Next key is fatigue management. Fatigue or tiredness results in decreased driving performance. This shows a decrease in reaction time, poor control of the steering wheel, difficulty in maintaining safe distance from the vehicles ahead and loss of concentration in doing other driving tasks. Some of the causes of fatigue include lack of sleep, driving time is not according to body clock, long hours at work, repetitive or monotonous activities, and physical limitations and medical condition. Therefore, a defensive driver must be in good condition and have a low fatigue level for a safe trip.

Finally, a key to defensive driving is following the laws, rules and regulations. The laws are there not to limit what we can do on the road but to provide order. The law is made for the safety of all and to protect the life of every road user.

Do you ever see yourself as a defensive driver? If so, let's take a look at some of the techniques used by a defensive driver.

First, there is the proper use of the brakes. Drivers who are not yet very skilled at driving often step on the brakes too hard. The brakes are strong, especially in new cars, so you have to step on them slowly. The vehicle may skid if you apply hard and sudden braking. Vehicle skidding is often caused by driving too fast and hitting the brakes. When stopping, the vehicle should be straight. A sudden turn while braking can cause damage and could overturn the vehicle. The driver should also know if the motor vehicle he is driving has ABS or anti-lock braking system or conventional braking system. If the vehicle has ABS, the brakes must be pressed hard. If conventional, the brake pedal should be pumped several times to prevent it from locking. Proper braking also includes maintaining the correct distance from the vehicles ahead. And to allocate enough space for sudden stops.

Another defensive driving technique is proper steering or steering wheel rotation. The hand position should be comfortable, and the body should be relaxed. Maintain a firm but gentle grip on the steering wheel. Do not tighten your grip when the road is wet. There is a chance that you will oversteer or understeer when you are holding the steering wheel too tightly. Also make sure the hand is positioned correctly at all times. You can also use one-hand steering wherein the left hand is on the steering wheel and the right hand is on the gear. Also make sure that nothing interferes with your hands and elbows while driving. And when changing lanes, do it slowly and not too sudden.

Now, let's talk about the proper gear shifting that is also a defensive driving technique. Poor timing and improper gear shifting can cause high fuel consumption and damage to the vehicle's engine. Make sure the vehicle is at the right speed before changing gear. When you feel that the vehicle has reached its full speed in its current gear position, you should not step on the accelerator further but shift to a higher gear instead. The change of gear depends on the speed, capacity and load of the vehicle.

In addition, there is the so-called engine brake. It is the process of slowing down a vehicle by stepping off the accelerator and downshifting gears instead of pressing on the brake pedal. To carry out engine braking, release the accelerator pedal to slowdown the vehicle. Once the vehicle is slow enough, you may downshift or lower the gear. Then you will feel a response in the engine and the vehicle will slow down even more. Another benefit of engine braking is that it reduces wear and tear on the brakes. It is also ideal to use when driving downhill, especially if the trip is long. Also by doing this, you can avoid heating of brake pads that may lead to brake loss. You can also perform engine braking in case of emergencies wherein the brake suddenly weakens or fails. You can stop the vehicle while applying the brakes by downshifting to the lowest gear and then releasing the clutch while shifting until the engine dies and the vehicle completely stops.

Safe reversing, maneuvering and changing lanes are also defensive driving techniques that a driver must learn. To execute these safely and orderly, the proper use of the sidemirror is very important. By quickly looking in the side mirror you should be able to immediately decide what your next move will be in driving, whether you will change lanes, overtake or give way to other vehicles. Double check the side mirror before changing lanes and always be aware of the movement of the vehicle ahead. Also allocate enough space before changing lanes.

And this is where our discussion on defensive driving ends.

May you remember the keys to effective defensive driving.

To recall these are the following: concentration, planning of your journey, consideration of the view from your vehicle, speed, fatigue management and compliance with the law. Also remember the different driving techniques for safer travels.